

**APPARATUS AND METHOD FOR TRANSMITTING AND
RECEIVING WAVELENGTH DIVISION MULTIPLEXING SIGNALS**

ABSTRACT

An optical sub-assembly (OSA) apparatus for use in an optical transmission system comprises a housing, a plurality of TO-can packaged optical devices, and a plurality of wavelength selective filters. Each of the plurality of TO-can packaged optical devices is sensitive to optical signal of one of a plurality of wavelengths. Each of the plurality of wavelength selective filters is capable of directing an optical signal of the one of the plurality of wavelengths in a pre-determined direction. The OSA apparatus can be used as one of an optical signal receiving apparatus and an optical signal transmitting apparatus.